

## **Guidelines for Letters of Intent to form Instrument Teams**

The Spallation Neutron Source (SNS) at Oak Ridge National Laboratory is a national research facility whose mission is to produce neutrons to investigate materials at the atomic level. The SNS will enable researchers to measure the structure and dynamics of materials using pulsed neutron beams. Prospective users of the SNS participate in instrumentation through Instrument Teams. Instrument Teams fall into two categories: an Instrument Advisory Team (IAT) works with SNS to design and construct a project funded instrument while an Instrument Development Team (IDT) builds and operates an instrument with external funds. IAT instruments will be available to the user community through a peer reviewed proposal system. IDT instruments would have a portion of their beamtime allocated for the scientific program of the IDT and the balance available for general users through the proposal system. The relative allocations will be commensurate with the contributions of the team to construction and operational costs.

Instrument Teams will be selected through a competitive peer-review process beginning with the submission of a Letter of Intent (LOI). LOIs will be evaluated by the Instrument Oversight Committee, an international scientific review body, which will make recommendations to the SNS management. Evaluations will be based on the need for the unique capabilities of the SNS, the quality of the proposed scientific program, and the capabilities of the principal investigators. Groups whose LOIs are approved will be invited to submit full proposals according to the appropriate guidelines (Guidelines for Proposals to Establish Instrument Development Teams at the Spallation Neutron Source or Guidelines for Proposals to Establish Instrument Advisory Teams at the Spallation Neutron Source). Since IATs will be advocating instruments that the SNS Project will be responsible for building and operating, prospective IAT members are encouraged to contact the SNS Instrument Systems group prior to submitting a Letter of Intent (see http://www.sns.anl.gov).

LOIs must contain, at a minimum, the items listed below. The overall length of the LOI should not exceed ten pages including supporting documentation, while the length of the scope of work should not exceed five pages.

- 1. Instrument Team title and acronym.
- 2. Name and contact information for team spokesperson (name, title, affiliation, address, telephone and fax numbers, and e-mail address).
- 3. A scope of work with a description of the proposed research program elements and the interrelationships, with emphasis on the unique uses of SNS capabilities. Identify the beamline or moderator to be used. Specify which team members will carry out each program element.



- 4. Describe the rationale for forming a multi-institutional or multidisciplinary consortium. Describe unique expertise, contributions, or resources of each team member.
- 5. Mode of access envisaged (IAT or IDT). If the intent is to propose an IDT instrument then describe a preliminary budget and proposed source(s) of funding for capital items, fabrication, assembly, and operations as well as an assessment of the likelihood of obtaining the funds.

Proposals for use of the Spallation Neutron Source not involving neutron scattering will be evaluated following the same procedure with the modification that evaluation will be performed by the SNS Scientific Advisory Committee supplemented by external expert review. In addition to the information outlined above LOIs should include an explanation of how the proposed facility would impact the neutron scattering capabilities of SNS. Such proposals would be expected to follow the IDT model since funding would be external to the SNS Project.

LOIs should be submitted to:

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